



131 Main Street-8th Floor  
Burlington, Vermont 05401

(802) 863-8424  
FAX: (802) 660-9034

June 21, 1996

Chuck Schwere  
VTDEC  
103 so. Main St., West Building  
Waterbury, VT 05671

RE: St. Albans/Marshall Ctr./ Ground Water Test

Dear Mr. Schwere:

Enclosed please find the results of the ground water testing conducted by ATC Environmental and in compliance with your directions.

According to the ATC staff, the results are good news for us. As we are nearing the end of our construction project and anxious to make final expenditures toward the improvement of the site, we would very much like to put the matter of contaminated ground water and its associated costs to rest. At your earliest convenience, please let me know what if you concur with ATC's interpretation of the results, and if any additional steps must be taken at this point.

Thanks again for all your help and informed counsel in this matter.

Sincerely,

Amy Johnston  
Project Manager

cc: Liz Curry

MAILED  
JUN 24 10 43 AM '96



# ATC ENVIRONMENTAL INC.

June 21, 1996

Ms. Amy Johnston  
Housing Vermont  
131 Main Street - 8th Floor  
Burlington, VT 05401

Post-It Fax Note 7671		Date 6/20/96	# of pages 9
To AMY JOHNSTON		From JOHN ROMAN	
Co./Dept. HOUSING VT		Co. ATC ENV.	
Phone # 863-8424		Phone # 434-2113	
Fax # 660-9034		Fax # 434-2160	
ORIGINAL MARKED TODAY			

Re: Ground Water Sampling Results  
Marshall Center  
Fairfield Street  
St. Albans, Vermont  
ATC Job# 20387-0012

Dear Amy:

The following findings are presented pursuant to the ATC Environmental Inc. (ATC) June 3, 1996 proposal for ground water sampling at the above referenced site. Samples were obtained from the bottom of a re-excavated pit formally containing one 8000 gallon fuel oil tank which was recently closed by removal. This re-excavated pit measured approximately 8 feet wide by 8' feet long and 7.5 feet deep and is reported to represent the center of the initial pit excavated for the purpose of tank removal. This reexcavated pit is located on the south east corner of the parcel. Please refer to the attached site diagram which details the pit location.

Ground water elevation was observed in the sampling pit to be approximately 7.5 feet below existing site grade. Limited ground water recharge into the pit was observed to be coming from the northeast and appeared to flow to the south-southwest in the general direction of Lake Champlain. A minor sheen was observed atop the ground water at the bottom of the sampling pit. Also, dark brown to black stained soils were observed on portions of the pit wall, however no discernible petroleum odor was noted. Ground water was sampled from the bottom of the pit directly utilizing sampling collection cups to transfer grab samples into appropriate laboratory sample containers. Water samples WS-01 and WS-02 were sent to the Con Test Analytical Laboratory in East Longmeadow Mass. for analysis for total petroleum hydrocarbons by EPA (IR) Method 418.1 and for volatile organic compounds (BTEX & MTBE) by EPA Method 8020 respectively. The analysis results for WS-01 indicate that 0.50 mg/l of total petroleum hydrocarbons were detected in groundwater withdrawn from the sample pit. The analysis results for WS-02 showed the ground water to be non-detect with regard to BTEX and MTBE with laboratory detection limits for the EPA Method 8020 analysis ranging from 0.2 ug/l (benzene) through 1.0 ug/l (total xylenes).

barely above  
the detection  
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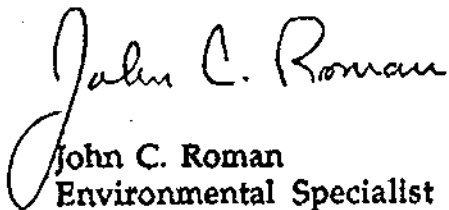
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Ms. Amy Johnston  
June 21, 1996  
Page 2 of 2

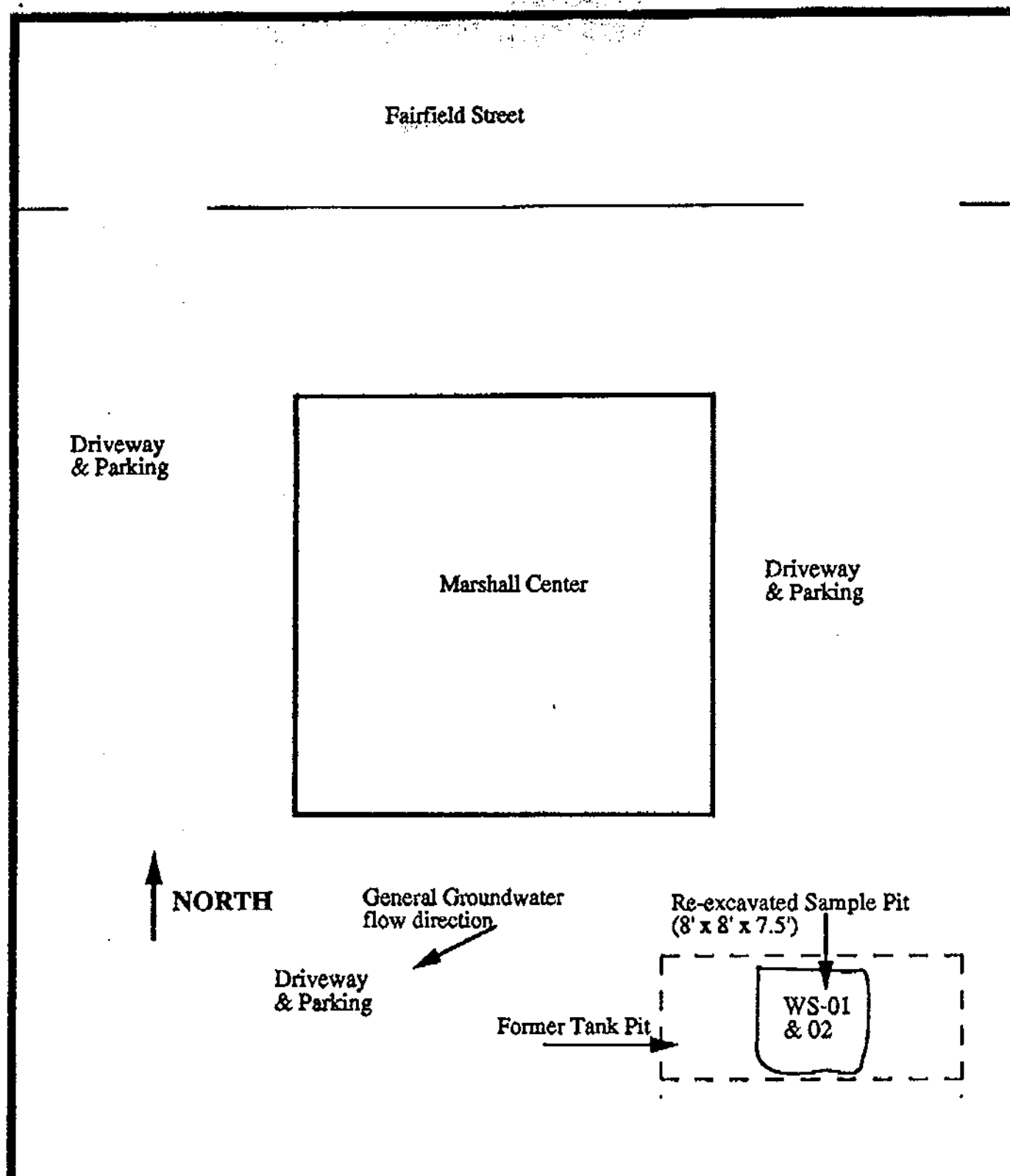
Thank you for allowing ATC Environmental to be of service. Should you have any questions and require further assistance please contact me or Tom Broido at (802) 434-2113.

Sincerely,  
ATC ENVIRONMENTAL INC.

  
John C. Roman  
Environmental Specialist

JCR/imh/20387-00012 VTH GW Results

Attachments: Site Diagram  
Laboratory Analytical Results



### Site Diagram

The Marshall Center  
Fairfield Street  
St. Albans, Vermont

Not to scale

WS-01 & 02 - Water Sample location.

ATC Environmental Inc..  
Project #20387-0012  
Drawn By: J. Roman  
Sampling Date: June 17, 1996

Jun 20 '96 10:35

P.07/07



(413) 525-2332  
(800) 634-8165  
FAX (413) 525-6405

## CHAIN OF CUSTODY RECORD

39 SPRUCE ST. • EAST LONGMEADOW, MASS 01101

Client Name: ATC Environmental Inc.  
 Attn: John Roman  
 Address: P.O. Box 3, Browns Trace Bldg  
Richmond, VT 05477  
 Site Location: Marshfield Cnt, St-Albans Vt  
 Sampled by: John Roman

Call Results: Yes X No X

Fax Results: Yes X No X

Telephone: 802 434-2113  
 Batch #: 24676  
 Contest Project #: 263870012  
 Client P.O. #:

Fax #: 802 434-2160

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Jun 20 '96 10:34 P.02/07



39 Spruce Street - 2nd Floor - East Longmeadow, MA 01028 • FAX 413/525-6405 • TEL 413/525-2332

ATC ENVIRONMENTAL - VERMONT  
BROWN TRACE BLDG., ROUTE 2  
RICHMOND, VT 05477  
ATTN: JOHN ROMAN

CONTACT: JOHN ROMAN  
FIELD OFFICE: VT

REPORT DATE: 06/20/96

PURCHASE ORDER NUMBER: RY1578

## ANALYTICAL SUMMARY

LABS BY #: LMS-24676  
JOB NUMBER: 20387-0012

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report

PROJECT LOCATION: MARSHALL CNTR., ST. ALBANS, VT

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST
WS-01	96810264	GRND WATER	FORMER TANK PIT GROUNDWATER	tpi (mg/l)
WS-02	96810265	GRND WATER	FORMER TANK PIT GROUNDWATER	btex/mtbe water

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

AHA 308	AHA ELLAP (LEAD) 6838
MASSACHUSETTS MA100	MAINE (POTABLE/NON-POTABLE)
CONNECTICUT PH-0567	VERMONT DOH (LEAD) No. 15036
NEW YORK ELAP 10899	RHODE ISLAND (LIC. No. 112)
PENNSYLVANIA DER 68-433	OHIO (ENVIRO. LEAD) # 10005
NEW HAMPSHIRE 2516	

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document.

Edward Denson 6/20/96  
SIGNATURE DATE

Ted Kopycinski  
Director of Operations

Edward Denson  
Technical Director

Jun 20 '96 10:34

P.03/07


**con-test**  
 ANALYTICAL LABORATORY

39 Spruce Street - 2nd Floor - East Longmeadow, MA 01028 - FAX 413/525 6405 - TEL 413/525-2332

 JOHN ROMAN  
 ATC ENVIRONMENTAL - VERMONT  
 BROWN TRACE BLDG., ROUTE 2  
 RICHMOND, VT 05477

 Contact: JOHN ROMAN  
 Field Office: VT

 06/20/96  
 page 1 of 2

Purchase Order Number: RV1578

 Project Location: MARSHALL CTRY., ST. ALBANS, VT  
 Date Received: 06/18/96

 LIMS-BAT #: LIMS-24676  
 Job Number: 20387-0012  
 Sample Matrix: GRND WATER

 Sampled: 06/17/96  
 FORMER TANK #11 UNKUNOWN MATRIX  
 WJ-02

	Units	96810265	Date	Analyst	MDL	SPEC LIMIT	P/F
			Analyzed				
Benzene	ug/l	ND	06/20/96	MFF	0.2		
Ethyl Benzene	ug/l	ND	06/20/96	MFF	0.5		
Hexyl tert-Butyl Ether (MTBE)	ug/l	ND	06/20/96	MFF	0.5		
Toluene	ug/l	ND	06/20/96	MFF	0.5		
p,m-Xylene	ug/l	ND	06/20/96	MFF	1.0		
o-Xylene	ug/l	ND	06/20/96	MFF	0.5		

Analytical Method(s):

EPA 602/SM846 8020

 SAMPLES ARE CONCENTRATED BY PURGE AND TRAP FOLLOWED BY GAS CHROMATOGRAPHIC  
 ANALYSIS WITH PHOTOIONIZATION DETECTION (PID).

 MDL = Method Detection Limit  
 ND = Not Detected  
 BDL = Below Detection Limit  
 NM = Not Measured

 SPEC LIMIT = a client specified, recommended, or  
 regulatory level for comparison with data to  
 determine PASS (P) or FAIL (F) condition of results.

Jun 20 '96 10:34 P.04/07



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06/20/96

page 2 of 2

LIMS-BAT #: LIMS-24676  
Job Number: 20387-0012  
Sample Matrix: GRND WATER

Sampled: 06/17/96  
FORMER TANK PIT GROUNDWATER  
WS-01

	Units	96810264	Date Analyzed	Analyst	MDL	SPEC LIMIT	P/F
.....	.....	.....	.....	.....	...	.....	---
Total Petroleum Hydrocarbons	mg/l	0.30	06/19/96	BLC	0.40		

## Analytical Method(s):

EPA 418.1

INFRA-RED DETERMINATION FOLLOWING LIQUID-LIQUID EXTRACTION OF  
HYDROCARBONS INTO 1,1,2-TRICHLORO- 1,2,2-TRIFLUOROETHANE (FREON 113)

MDL = Method Detection Limit  
ND = Not Detected  
BDL = Below Detection Limit  
NM = Not Measured

SPEC LIMIT = a client specified, recommended, or  
regulatory level for comparison with data to  
determine PASS (P) or FAIL (F) condition of results.



Jun 20 '96 10:34 P.05/07



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## QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates  
Sample Matrix Spikes and Matrix Spike DuplicatesBATCH QC: Lab Fortified Blanks and Duplicates  
Standard Reference Materials and Duplicates  
Method Blanks

Report Date: 06/20/96

Lims Mat #: LIMS-24676

Page 1 of 2

QC Batch Number: QC/PID-1179

Sample Id	Analysis	QC Analysis	Values	Units	Limits
-----	-----	-----	-----	-----	-----
96810265	1-Cl-2-Fluorobenzene	Sur. Recovery (PID)	96.7	%	83.2-111.6
BLANK-06401	Benzene	Blank	<0.2	ug/l	
	Ethyl Benzene	Blank	<0.5	ug/l	
	Toluene	Blank	<0.5	ug/l	
	o-Xylene	Blank	<0.5	ug/l	
	p-m-Xylene	Blank	<1.0	ug/l	
	Methyl tert-Butyl Et	Blank	<0.5	ug/l	

Jun 20 '96 10:35 P.06/07

**con-test**  
ANALYTICAL LABORATORY

39 Spruce Street • 2nd floor • East Longmeadow, MA 01126 • FAX 413/525-6103 • TEL 413/525-2332

## QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates  
Sample Matrix spikes and Matrix Spike DuplicatesBATCH QC: Lab Fortified Blanks and Duplicates  
Standard Reference Materials and Duplicates  
Method Blanks

Report Date: 06/20/96

Lims Bat #: LIMS-24676

Page 2 of 2

QC Batch Numbers: TPH-0636

Sample Id	Analysis	QC Analysis	Value	Units	Limit
-----	-----	-----	-----	-----	-----
LFBBLANK-02793	Total Petroleum Hydr	Lab Fort Blank Amt.	20.30	mg/l	
		Lab Fort Blk. Found	16.84	mg/l	
		Lab Fort Blk. % Rec.	82.96	%	
		Dup Lab Fort Bl Amt.	20.30	mg/l	
		Dup Lab Fort Bl. Fnd	17.18	mg/l	
		Dup Lab Fort Bl %Rec	84.63	%	
		Lab Fort Blank Range	1.67	units	0.00-16.30
		Lab Fort Bl. Av. Rec	83.79	%	73.50-107.00